Online Learning in Higher Education: Comparing Teacher and Learner Perspectives

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Abstract: Higher education teachers' and learners' experiences of online teaching and online learning are tempered by their respective perceptions of their online educational environments. While much research has been undertaken in recent years to explore students' or teachers' perceptions of online education, less research has been conducted that investigates the perceptions of both groups in parallel contexts. Utilizing a mixed methods research approach, focus groups and questionnaires were administered to three cohorts of students and their teachers, across three institutions. Results are presented in terms of teachers' and students' perceptions of preferred online learning environments, including their most and least agreed upon perceptions, and their perceptions of the major skills needed by online teachers. Finally, implications for course design, professional development and future research are considered.

Introduction

Studying online is a growing medium not just for distance students, but also for on-campus students who, because of family or work commitments, find online learning convenient and sometimes even necessary. Whether lecturers are experienced or new to higher education, the process of adapting to teaching online is not simple and they come to the task of teaching online with a variety of perceptions about the pedagogy and technology of online learning. Needless to say, students learning online also have their own set of perceptions and expectations of how learning in this mode should work for them. It is logical to hypothesize that, for any particular course of study, students' and lecturers' views on what is important to a successful online course may not be totally aligned.

This paper reports on a subset of the outcomes of a study that sought to identify the necessary threshold concepts for teachers who are novices in online education. As part of this research, the nexus between teachers' perceptions and students' perceptions of online learning contexts was investigated and documented. The outcomes reported in this paper were drawn from the triangulation of focus group data collected from students and teachers, and the results of a survey administered to both groups. The survey used was a modified version of the OLES (Online Learning Environment Survey) (Pearson & Trinidad, 2005; Trinidad, Aldridge, & Fraser, 2005) which sought to identify students' and teachers' preferences of online learning environments.

Literature Review

Threshold Concepts in Online Learning

Teachers who are new to the online learning space will typically experience issues in transitioning into the virtual classroom medium. There will be new ways of thinking, new ways of communicating and new teaching methods to learn. Using the language of *threshold concepts* (Meyer & Land, 2005), teachers experience hurdles they need to pass over that may require them to put aside pedagogy that they have known, used and trusted over an extended period. Such a transition means that *teachers* need to become *learners* as they encounter what Perkins (2006) calls *troublesome knowledge* because, in many ways, the new learning context may be counter-intuitive to their experience. Once a teacher recognizes that new levels of knowledge and practice are required to be an online

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teacher, and the specific new level of knowledge and practice is identified, then, according to King and Felton (2012), the teacher-as-learner has "crossed the threshold, she is able to see and learn significant new things." (p. 5).

Given that this paper is a partial report on research funded by the Office for Learning and Teaching (OLT), in the final report to the OLT a set of threshold concepts for novice online teachers that had been identified, were reported and reproduced on a website (http://tcs4nots.avondale.edu.au/). These included specific concepts under three separate themes incorporating curriculum and course design, having an online presence, and fostering online relationships that promote interaction.

Online Learning and Face-to-face Learning

As online learning has been developed over the last couple of decades, there have been many drivers to justify its continued growth. These have ranged from arguments surrounding equal access to education for all, to economic rationalization for students and institutions (Glogowska, Young, Lockyer, & Moule, 2011). As pointed out by Glogowska et al. (2011), however, there has been concern that online learning has been primarily driven by technology instead of pedagogy. Taking pedagogy into account, Chang et al. (2015) looked at technology-supported learning environments (TSLEs), how they are measured, the domains they have traditionally measured, and how perceptions of TSLEs are researched. The point is made that with the continuing development of online learning and other types of TSLEs, the different scales that measure student perceptions of learning environments need to be reassessed. In the light of learning theories, student perceptions of online learning environments need to be studied in the affective and social domains as well as in the cognitive domain.

Teachers' Perceptions of Online Learning

While more studies of students' perceptions of online learning contexts have been conducted, when compared to studies about teachers' views (Palmer & Holt, 2009), a number of researchers have reported on the voices and views of teachers in higher education (for e.g., Baran, Correia, & Thompson, 2013; Rienties, Brouwer, & Lygo-Baker, 2013). The findings of some of these studies have also presented reasons why some teachers resist recent developments in online education. As there is a growing necessity for more online courses to be provided, resistance needs to be overcome where each discipline has their own set of reasons why their particular course would not be suitable for full online implementation. Downing and Dyment (2013) examined teachers' perceptions of readiness and preparation to teach online, and investigated whether online learning is appropriate for teacher education. This study found a range of limitations that were roadblocks to online implementation. These were in addition to a discussion about a philosophical divide based on whether online teacher education was able to provide the best sort of modelling for pre-service teachers. Other perceived impediments to online implementation identified time constraints of academic staff, lack of technical skills and reticence in teacher ability to translate appropriate pedagogies to the online environment (Downing & Dyment, 2013).

Students' Perceptions of Online Learning

Cochran, Baker, Benson and Rhea (2016) conducted focus groups with students from a business faculty to establish general student perceptions of their online learning environment across courses rather than focusing on single evaluations for single courses. They discovered students appreciated the convenience of online learning and accepted that they needed to manage their time more efficiently in such learning contexts. The students' expectations were that a teacher's presence was very important to them and that sometimes tasks set online appeared to be aimed at keeping them busy rather than providing meaningful learning experiences. While immersed in the technology and the content of several online courses simultaneously, the personal contact was very important to students, if only to point them in the right direction with assessments, online discussions and resource location. In a similar study, but with nursing students, Glogowska et al. (2011) sought to discover student perceptions of blended learning in one particular module. They discovered that these students, despite recognizing the drawbacks of working online, were enthusiastic about the convenience blended learning presented for them. The areas they identified as needing more attention were in the "community of inquiry" (p. 890) area where it can be more difficult for lecturers to provide an appropriate level of interaction and stimulus while satisfying course outcomes. The study by Bowers and Kumar (2017) about students' perceptions of teaching and social presence in online and face-to-face learning contexts also found that students noted teacher and social presences more so in the online version of the

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course. While also discovering that convenience to students of online learning was a key factor for them, Kim, Liu and Bonk (2005) found that availability of online courses was the major factor in MBA students' perceptions of online learning environments. This was followed up with issues of quality, length and course costs.

Student perceptions of the level and quality of interaction in an online course were also measured by Picciano (2002) who discovered that there was a strong connection between student interactions and perceived student performance in online courses. He discovered that while strong student interactions had a significant impact on the quality of written assessments, examination results did not differ substantially. However, the most significant finding in this study was the very strong relationship between student social presence and student perceptions of learning. The idea of 'online presence' was also studied by Russo and Benson (2005) who looked into the connection between the way students perceived the interactions had occurred in the online environment, and their attitude and satisfaction with their own level of learning. This 'online presence' extended to the online input from the instructor for the course which also correlated highly with student course satisfaction and learning. Other researchers have also provided evidence of the significance of teacher, social and cognitive presence in online learning context (Garrison, Anderson, & Archer, 2001; Garrison & Cleveland-Innes, 2005; Hosler & Arend, 2012; Kear, Chetwynd, & Jefferis, 2014; Lowenthal, 2010; Mandernach, Gonzales, & Garrett, 2006). These studies describe the value of such online course features, referred to variously as 'interaction', 'online presence', 'personal contact', and 'social presence'.

Students' and Teachers' Perceptions of Online Learning

Few previous research studies have collected data on the contrast between teacher and student perceptions of online learning environments. One such analysis was carried out by Palmer and Holt (2009) who acknowledged that seeking information about students' perceptions of online learning was a much more researched area than that of teacher perceptions. Furthermore, they point out that there is an absence of data that compares the perceptions of students and teachers with regard to online learning. Their research focused on the rollout of a new online learning environment into their institution. Teachers and students were given the same survey and it was discovered that students rated the online learning environment (OLE) more highly than staff and that staff initially valued the OLE more for the ease of sharing information than for any pedagogical benefits. Students, however, saw the OLE as enhancing their learning experiences. Similar results were obtained by Napier, Dekhane and Smith (2011) who looked at how students and teachers related to the introduction of blended learning into a degree program.

Having looked at students' and teachers' different perceptions of the efficacy of online learning environments and, given the fact that there is not a lot of research published that contrasts the two perspectives, this paper will now report on an extensive research project that examined the differing perceptions that teachers and students have for online courses. The paper also reports on the results of an examination of the overlap where agreement was discovered between teachers' and learners' perspectives of online learning in higher education.

Methods

The research methods adopted throughout this project were designed with the intent to recognize the importance of the contributions of *both* teacher and learners within online learning environments in higher education contexts. This research was purposely conducted in contexts that included both teachers and learners because more research is needed that considers the views of both groups within the same context.

This research study set out to answer the following research question: *How do higher education teachers and students perceive online learning contexts?* The primary purpose of posing this question was to determine the perceptions of *ideal* or *preferred* online learning environments held by *both* teacher and students in three higher education institutions. The secondary purpose of seeking answers to this question was to identify how online courses at the three institutions could be modified to meet the requirements and expectations of the teachers and students who teach and learn within these online learning environments. This paper reports on answers to the primary question. Answers to the second research question are being reported elsewhere.

Methodological Approach

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This project utilized a mixed methods research methodology (Creswell & Plano Clark, 2011) that was implemented across three research settings: two higher education institutions in Australia and one university in the United States. Focus groups were facilitated, and questionnaires were administered with students and teachers. A previously trialed and tested questionnaire, the *Online Learning Environment Survey (OLES)* was updated and modified to suit the context in which the research was conducted, with permission of the original authors of the questionnaire (Pearson & Trinidad, 2005; Trinidad et al., 2005). Questionnaire data were gathered from teachers and students at these three institutions. Secondly, focus groups were conducted with teachers and students, separately, to supplement the data gathered from the questionnaires. Lastly, the data gathered from the questionnaires and the focus groups were analyzed and triangulated to answer the research question outlined above.

Participants

Because data about the perceptions of higher education teachers *and* students were being sought to answer the study's research question, participants from both groups were required to take part in the study. Table 1 outlines the numbers and types of participants from each of the three participating institutions. The staff-participants selected for the study included staff from each institution who were engaged in designing and teaching online undergraduate courses and some of these staff were also responsible for supervising and teaching postgraduate students. The student-participants included both undergraduate and postgraduate students. Participants were drawn from varied disciplines, including education, nursing, theology, arts, business and science.

Institution	**Focus groups**		**OLES questionnaires**	
	Staff	**Students**	**Staff**	**Students**
Institution 1	8	9	17	35
Institution 2	13	12	56	68
Institution 3	4	0	1	5
TOTAL	25	**21**	**74**	**108**

Table 1. Number and type of participants from each institution

Data Collection and Analysis

Two data gathering instruments were used: 1) the Online Learning Environment Survey (OLES); and 2) a focus group. Together, the data from these two instruments were triangulated to answer the study's research question. The original OLES instrument included 54 items arranged within nine scales (Pearson & Trinidad, 2005; Trinidad et al., 2005) and it had two versions (preferred and actual) each of which elicited responses about the participants' ideal perceptions and perceptions based on experience. Because the researchers in this study were investigating the participants preferred or ideal perceptions of online learning environments, only the *Preferred* version of the instrument was used. The original OLES authors were consulted and their permission was given to update and modify the original OLES instrument to match the contexts and purposes of the current study. After revision, the modified version of the OLES was made up of 48 items and eight scales. A teacher version and a student version of the OLES instrument were developed which required some word modification to suit each participant group. Respondents completed the questionnaire online by rating items using a five-point scale (Almost Never, Seldom, Sometimes, Often, Almost Always). Table 2 shows sample items from each version of the OLES.

Based on the data gathered from the OLES questionnaires, descriptive statistics were calculated to determine the mean responses from the teachers' and students' responses. The highest scoring items and the lowest scoring items were identified to determine which items were agreed upon most and least by the participants in the study. These results were linked to each of the eight scales within the instruments.

The transcripts from the focus groups conducted with staff and students supplemented the findings that were extracted from an analysis of the data gathered from the students' and teachers' responses to the OLES questionnaires. Samples of questions from each version of the focus groups are outlined in Table 3. These questions reveal the participants' deeper thoughts about their preferred online learning environments and encouraged them to consider their own point of view as well as the points of view of their teachers or students. Because this study had a

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professional development focus, many of the questions asked of the participants in the focus groups emphasized the knowledge and skills that teachers needed to operate competently in an online learning environment.

After the focus group recordings were transcribed, the text in the transcripts was analyzed to determine the staff and students' views about how teachers contribute to developing ideal online learning environments. Firstly, memos were attached to the data to guide the initial stage of the analysis of this qualitative data. With the key research question in mind, the memoing process gave researchers the opportunity to record preliminary insights into the data before the coding took place. Possible links between concepts were also noted during this process and broad themes were identified. Next the data were coded inductively, a process which identified themes that emerged from the data. These multiple codes were then grouped into meaningful categories which formed broader themes. Lastly, links between these themes were identified.

Once the findings were extracted from the processes of analyzing the quantitative data from the questionnaires and the qualitative data from the focus groups, these data and findings were analyzed alongside each other and triangulated. This process ensured that the answers to the research question were supported by multiple sources of data that had been gathered from the study's two key groups of participants: higher education teachers and students who were engaged in teaching and learning in online learning environments.

Version	**Scale**	**Item**
Teacher	Computer	I prefer my students to ask me questions online
	Teacher support	I prefer it when it is easy for students to contact me online.
	Student Interaction & Collaboration	I prefer students to discuss their ideas with other students.
	Personal Relevance	I prefer it when students can link class work to their life outside of the class.
	Authentic Learning	I prefer to set assignments that deal with real-world information.
	Student Autonomy	I prefer it when students play an important role in their learning.
	Equity	I prefer to give the same amount of help to all students.
	Asynchronicity	I prefer to allow access to the discussion forum at places/times convenient to students.
Student	Computer	I prefer to find out course or unit information online.
	Teacher support	I prefer it when the teacher/lecturer encourages my online participation.
	Student Interaction & Collaboration	I prefer to relate my work to other's work.
	Personal Relevance	I prefer to apply my everyday experiences in class.
	Authentic Learning	I prefer to use real facts in class activities.
	Student Autonomy	I prefer to approach learning in my own way.
	Equity	I prefer to get the same amount of help from the teacher/lecturer as do other students.
	Asynchronicity	I prefer to take time to think about my messages before I post them.

Table 2. Sample items from teacher and student OLES

Results

The research team gathered data from student-participants and teacher-participants by conducting focus groups and by administering a modified version of the OLES (Pearson & Trinidad, 2005; Trinidad et al., 2005) for the purposes of determining perceptions of students' and teachers' preferred online learning environments. Because factor analysis did not reveal any scale structure in the student or teacher survey data produced by responses to the OLES, individual items were analyzed using descriptive statistics. After the mean responses from the teachers' and students' responses were analyzed, the highest scoring items and the lowest scoring items were identified to determine which items were agreed upon most and least by the students and teachers in the study (see Table for the five highest scoring items and the five lowest scoring items).

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Furthermore, students' perceptions were compared with teachers' perceptions. Mean responses for student and teacher data were correlated and a weak negative relationship between the means (-0.26) was found. Then, the five most agreed upon responses, based on calculating the lowest standard deviations, and the five least agreed upon responses, based on highest standard deviations, were identified (see Table 5).

Version	Topic	Question
Teacher	Learning more	What are the major issues or topics you would like to learn more about in regard to designing units in online (or partially online or blended) contexts and teaching in online (or partially online or blended) contexts?
	Skills	What are the major skills you would like to develop in regard to designing units in online (or partially online or blended) contexts and teaching in online (or partially online or blended) contexts?
	Barriers	What major barriers do you encounter or expect to encounter in regard to designing units in online (or partially online or blended) contexts and teaching in online (or partially online or blended) contexts?
Student	Learning more	What are the major things that teaching staff need to know about when they create and teach in online units (or partially online or blended units)?
	Skills	What are the major skills that teaching staff need to know about when they create and teach in online units (or partially online or blended units)?
	Barriers	What major barriers do teaching staff face when they learn how to create and teach in online units (or partially online or blended units)?

Table 3. Sample questions used in teacher and student focus groups

Findings from the data analyses of the students' and teachers' OLES responses with the highest mean agreement score (see Table 4) revealed that students were pointing towards the teachers for a better service while teachers were pointing to students for a better performance. Equity featured frequently in student preferences. Not only did items on equity get the highest mean scores with students, but there was the greatest agreement between students on these items. Communication by lecturers features most highly in the student wish list. While questions of equity rated highly for students, three of the equity items were in the bottom five items for lecturers. Both students and teachers put student collaboration, group work and online discussions very low in their preferences. Overall a negative relationship was found between the priorities for students and teachers.

When students' preferred perceptions and teachers' preferred perceptions of what makes a quality online learning environment were compared, areas of overlap (similarities) and differences were identified between students' and teachers' perceptions, as illustrated below in a Venn diagram (see **Error! Reference source not found.**).

To augment the findings from an analysis of the data gathered from the students' and teachers' responses to the OLES questionnaires, transcripts from the focus groups were analyzed. Findings from this analysis revealed the teachers' and students' perceptions about the major skills needed by online teachers (see Table). While there was some overlap between the perceptions held by teachers and students about online teacher skills, the students clearly expressed a more diverse and comprehensive set of perceptions about the major skills needed by online teachers.

Students were concerned about the quality of teaching and provided more detail about what they expected in terms of support from teachers. Areas of greatest emphasis were: prompt feedback and clarity of communication by teachers, going beyond content delivery and establishing a personal presence by more frequent communication and by using ICT (Information and Communication Technologies) such as Skype, audio and video so that students can see that the teacher is present and concerned.

While teachers commented that students needed to be more self-regulated online, students spoke of the need to have more support, clarity and connection, progress reports and active learning with peers. This finding indicates that teachers expect students to have the skills and motivation to study in an online environment with minimal support, while students commented that they require more guidance, detail and for teachers to provide them with a staged, progressive learning experience. Barriers that prevented teachers from developing the skills required

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for effective online teaching included issues such as: a lack of ICT skills, not being aware of the value of interaction in online courses, a lack of time, students' lack of self-regulation skills, difficulty meeting diverse students' needs, lack of knowledge about learning design and a change of teacher identity in the online context. Overall, student comments on the online learning experience tended to be negative, while teachers' comments focused on the need for more time.

Students' perceptions	Teachers' perceptions
Perceptions of preferred online learning environments (highest mean score)	
I prefer it when the teacher/lecturer responds promptly to my online questions.	I prefer students to approach learning in their own way.
I prefer to be treated the same as other students in the class.	I prefer to work with real examples.
I prefer to get the same amount of help from the teacher/lecturer as do other students.	I prefer students to take time to think about their messages before posting them.
I prefer to work with real examples.	I prefer my students to submit assignments online (e.g. email, Learning Management System, Turnitin, etc.).
I prefer it if my work receives as much praise as other students' work.	I prefer to give the same opportunity to all students to answer questions.
Perceptions of preferred online learning environments (lowest mean score)	
I prefer to be involved in group work as part of my activities.	I prefer to give the same amount of praise to all students' work.
I prefer to participate in online discussions with other students.	I prefer to give the same amount of help to all students.
I prefer to work with others.	I prefer it when students can learn things about the world outside of the class.
I prefer to ask the teacher/lecturer questions online.	I prefer students to collaborate with other students in the class.
I prefer to collaborate with other students in the class.	I prefer to give equal attention to all student questions.

Table 4. Perceptions of preferred online learning environments

Students' perceptions	Teachers' perceptions
Most agreed upon perceptions of preferred online learning environments	
I prefer to get the same amount of help from the teacher/lecturer as do other students.	I prefer to respond promptly to student questions online.
I prefer it if my work receives as much praise as other students' work.	I prefer it when it is easy for students to contact me online.
I prefer to be treated the same as other students in the class.	I prefer it when students can relate their work to other's work.
I prefer to work on assignments that deal with real-world information.	I prefer students to write and post messages because it helps them to think.
I prefer to study real cases related to the class activities.	I prefer to give the same encouragement to all students in the class.
Least agreed upon perceptions of preferred online learning environments	
I prefer to learn things about the world outside of this class.	I prefer to encourage student online participation.
I prefer to relate what I learn to my life outside of this class.	I prefer it when students play an important role in their learning.
I prefer to pursue topics that interest me.	I prefer students to read posted messages at times that are convenient to them.
If I have an inquiry, I prefer the teacher/lecturer to respond quickly.	I prefer students to post messages because it improves their writing skills.
I prefer to access assessment information online.	I prefer to use real facts in class activities.

Table 5. Most and least agreed upon perceptions of preferred online learning environments

Discussion

The purpose of the study outlined in this paper was to close the gap in recent online education literature by gathering data from both teachers and learners to develop an understanding of the preferences of both groups within the same context. Some of the results were most revealing in that, to a substantial extent, students and teachers appear to be seeking different processes and outcomes in the online space. This study has identified the varying perspectives by establishing the threshold concepts that teachers and students see as important for online teachers.

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To this extent this research attends to the problem that Palmer and Holt (2009) pointed out that perceptions of online learning have only been done from student *or* teacher points of view while this study contrasts the perspectives of both. Palmer and Holt (2009) also noted that students' perceptions had been researched more than teachers' perceptions.

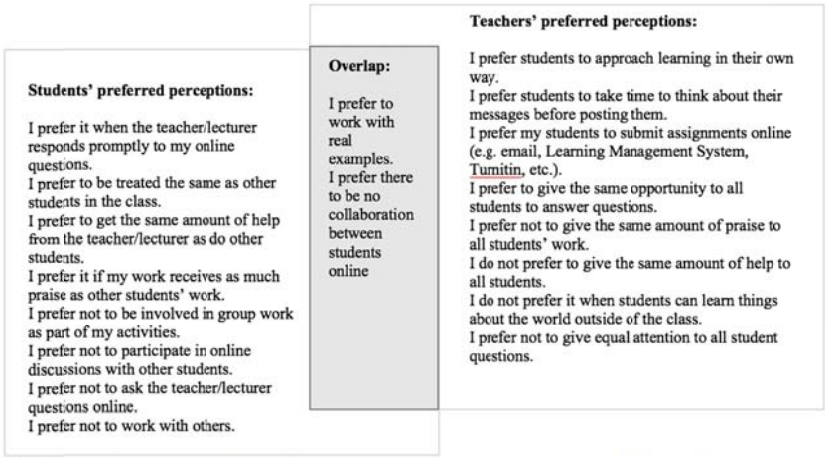


Figure 1. Similarities/ differences of students' and teachers' perceptions of preferred online learning environments

Students' perceptions	Teachers' perceptions
• Support students • Give prompt feedback • Track student progress • Encourage, motivate • Be interesting and engaging • Stage the learning • Communicate clearly • Troubleshoot technology problems • Scaffold learning • Connect on a personal level, get to know students • Create student-to-student connections • Make expectations clear • Give students opportunity to talk, interact, share	• Developing engaging learning activities • Planning for interaction • Clear communication • Building relationships with students • Provide scaffolding and support • Being visible and present for students

Table 6: Students' and teachers' perceptions of the major skills needed by online teachers

This research has been conducted across varying disciplines across two countries and three institutions, and, as such, has confirmed and expanded on the importance of interaction and online teacher presence that was evident in some previous research much of which had only been conducted in settings of single courses, disciplines or modules (Cochran et al., 2016; Glogowska et al., 2011; Kim et al., 2005).

Another observation from contrasting the perceptions of teachers and students in this study was that the study's results found that students were more concerned with equity than teachers. In fact, equity was at opposite ends of the spectrum representing the priorities of the two parties. However, the study did find that both teachers and students were concerned with authentic, real-life examples which highlights the importance of the work of Herrington and her colleagues (Herrington, Oliver, & Herrington, 2007; Herrington, Reeves, & Oliver, 2010) that emphasizes the value of authentic tasks and contexts in online learning contexts. Another area of contrast identified in the findings of this study was that while students appear to want more support from staff, staff want students to be more self-regulated. Both of these aspects are spoken of as important in the literature but the fact that each party is attributing the responsibility for this to the other represents a clash of ideas. This discord between the two groups'

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expectations of online learning contexts requires further investigation, especially in relation to how such a contrast of ideas may affect learning outcomes in online courses. Along the same lines, it seems that each party is pointing to the other as being responsible for creating quality online learning environments. It is also interesting to note that while students believe the most important role of teachers is to support students, teachers see their major role as producing engaging learning materials. This mismatch of priorities, drawn from the two groups, requires further research. Teachers and students did agree that communication and real life aspects of courses were vital, especially having the opportunity to ask questions in authentic contexts and to have access to authentic examples. Surprisingly, there was also agreement about the limited value of student collaboration online despite the significant quantity of research that attests to its pedagogical value. For example, recent research has espoused the value of online collaboration in enhancing virtual discussion activities (Sherblom, Withers, & Leonard, 2013), student engagement (Bouta, Retalis, & Paraskev, 2011), assessment (Burnett & Roberts, 2005) and learning in general (Coughlin & Kajder, 2009; Treleaven, 2008). However, when asked about their preferred online environments, both teacher-participants and student-participants in this study indicated that online collaboration was low on their list of priorities (as illustrated in Table).

Conclusion

The findings of this study have provided evidence from three groups of higher education students and teachers of the perceived value of interaction, communication and teacher presence, along with authentic aspects of online learning contexts. Information about these perceptions was drawn from both teachers and students in higher education contexts. The study's results have supplemented earlier research in this area in that results have been identified across a broad range of disciplines, courses and institutions. In fact, whereas previous research has concentrated on either students or teachers in a single course in a single discipline, this research sought to compare and contrast student and teacher perceptions to establish what they see as most important in online courses. The differences in perceptions of teachers and students in higher education online learning were found to be in key areas of online education and were quite pronounced; students focused more on prompt feedback, support, and equity whereas teachers' priorities were more focused on planning engaging activities and encouraging students' independent thought. Findings of this research also revealed teachers' and students' contrasting ideas between whether teachers or students should primarily be responsible for the quality of student learning.

A surprising result that appears to be unique to this study was that teachers and students both discount student collaboration as being important or necessary in online contexts. This may be due to logistical and convenience issues rather than either party denying the pedagogical benefits of student collaboration. Further research is recommended in this area to investigate the reasons behind such observations. Furthermore, a new area of research, introduced by students, has been revealed in relation to expectations of online learners; that is, the importance of equity and how it is perceived by online learners. There does not appear to have been any previous research that has reported this in depth. More research is recommended in relation to perceptions of equity and how it is achieved in online learning contexts in higher education.

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