

FLIPPED WEBINARS FOR ONLINE PSYCHOLOGY STUDENTS: IS ATTENDANCE AN APPROPRIATE QUALITY INDICATOR?

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Abstract

Interaction and collaboration support student satisfaction and learning in online education, yet participation in synchronous activities can be challenging for online students due to work and family obligations. An experimental development project was conducted, in which a flexible, voluntary flipped webinar series was implemented for online psychology students over three terms. The aim was to support student motivation through active and collaborative learning. This paper reports findings from one component of the data collection, namely a student evaluation ($n = 47$, response rate: 26%) including both quantitative and qualitative data. Results revealed high perceived learning and moderate perceived social benefit. However, attendance remained low across the terms, at levels comparable to other voluntary synchronous webinar series. Low attendance raises questions about how the effects of flexible, synchronous teaching interventions should be interpreted, and this paper examines the role of attendance as a quality indicator in online education. Self-determination theory (SDT) was used as a conceptual framework for the pedagogical design of the flipped webinar series. Three single-item statements were adapted, translated, and contextually adjusted from an established SDT instrument to serve as exploratory indicators of need satisfaction. Results indicate that the needs for autonomy and competence were generally supported. Attendance was associated with lower perceived autonomy and higher perceived relatedness. The findings suggest that perceived need satisfaction may function as a supplementary quality indicator.

Keywords: *Flipped classroom, higher education, online learning, quality measures, self-determination theory.*

1. Introduction

Interacting and collaborating with peers and teachers has been shown to be important for online students' satisfaction (Wallace, 2003) and learning (Regmi & Jones, 2020). However, participating in a learning community can be challenging for online students due to competing commitments such as work and family (Hart, 2012). In response, a flexible flipped webinar series was implemented for online psychology students over three terms. The aim was to support student motivation through active and collaborative learning. Attendance and student evaluation data were used to assess the quality of the intervention as part of an experimental development project.

1.1. Conceptual framework: Self-determination theory

Self-determination theory (SDT) served as a framework to support the pedagogical design of the flipped webinar series. According to SDT, the needs for autonomy, competence, and relatedness must be satisfied for autonomous motivation to thrive (Ryan & Deci, 2000). Autonomy, defined as the experience of choice and volition, informed the decision to offer the webinar series on a voluntary basis.

2. Teaching design

The respondents were enrolled in a Developmental Psychology course at a Norwegian university college offering highly flexible study programmes, characterised by few compulsory activities. Three cohorts of online students enrolled in Developmental Psychology were invited to join voluntary flipped classroom webinars. Flipped classroom is a teaching model characterised by flexibility (Akçayır & Akçayır, 2018), in which students prepare in advance and class time is used for active and collaborative learning. Flipped classroom sessions usually take place in person, whereas the respondents took part in a fully digital version. Preparatory work could be carried out at any chosen time.

3. Methods

Attendance was recorded by the teacher. Quantitative and qualitative data were collected across terms through an anonymous online questionnaire distributed to all enrolled online students in Developmental Psychology. This paper focuses on the evaluation from autumn 2024 ($n = 47$, response rate: 26%), when five voluntary flipped webinars were offered.

The student evaluation included quantitative measures regarding perceived academic and social outcomes, and open-ended questions on strengths and limitations of the webinar series. Three single-item statements (i.e., items 1, 12, and 15) assessing autonomy, competence, and relatedness were adapted from an established SDT instrument (Ilardi et al., 1993) to serve as exploratory indicators of need satisfaction within the course. The items were translated into Norwegian and adapted to the higher education setting. The three items were: “I feel that I have a strong influence over my own study situation”, “On most study days, I experience a sense of accomplishment”, and “Fellow students care about me.” The statements were rated on a seven-point scale (1-7), with 7 indicating “very true”.

4. Results

In the student evaluation of the flipped classroom series, 71% reported a high level of academic outcome, 26% a moderate level and 3% a low level. Regarding social benefit, 26% reported a high level, 35% a moderate level, and 38% a low level. The qualitative feedback was predominantly positive. Overall attendance remained low (12% across terms). Mean scores were 6.0 ($SD = 1.1$) for autonomy, 5.2 ($SD = 1.2$) for competence, and 3.7 ($SD = 1.8$) for relatedness. A Spearman’s rank-order correlation revealed a significant negative association between attendance and perceived autonomy ($\rho = -.37, p < .05$) and a positive association between attendance and relatedness ($\rho = .33, p < .05$). There was no significant association between attendance and competence.

5. Discussion

The student evaluation showed high levels of perceived academic learning and a moderate degree of perceived social benefit, which can be interpreted as positive given the duration of the webinar series.

The respondents reported a very high mean score on perceived autonomy and a relatively high score on competence, suggesting that they generally experienced choice and mastery within the course. Relatedness received the lowest mean score. This finding aligns with previous research identifying relatedness as the most difficult need to support in online learning contexts (Salikhova, Lynch, & Salikhova, 2020).

Attendance was associated with lower perceived autonomy and higher perceived relatedness (Spearman’s ρ). In line with Funder and Ozer (2019), these correlations can be considered large. However, given the limited sample size and the use of single-item measures, which may affect reliability and construct validity, the findings should be interpreted with caution. Furthermore, correlation analyses do not establish causality.

5.1. The role of attendance and perceived need satisfaction as quality indicators

The results suggest that the needs for autonomy and competence were supported. The negative association between attendance and autonomy might reflect that students who experience high degrees of autonomy also score high on self-regulation, making attendance in synchronous teaching appear less important. The positive association between attendance and relatedness might suggest a positive social benefit from collaborating with peers, but it can also reflect that socially oriented students may be more likely to participate in collaborative teaching activities.

While respondents expressed satisfaction with the webinar series, overall attendance remained low. Comparable attendance levels have been reported in other voluntary synchronous webinar series. Low attendance raises concerns regarding the interpretation of the effects of flexible synchronous teaching interventions and calls into question the allocation of teaching time and resources.

Although *attendance* is typically not presented as an explicit indicator of quality in online education, *engagement* is implicit in quality indicators such as interaction with peers and with teachers (Hafeez, Naureen, & Sultan, 2022; Valai, Schmidt-Crawford, & Moore, 2019), and engagement in synchronous learning tasks (Valai et al., 2019). Engagement may constitute a more meaningful indicator of quality. However, in practice, attendance is often a more accessible source of data and is likely to serve as an important – if not decisive – factor in decisions regarding the continuation of digital synchronous teaching interventions.

One interpretation of low attendance is that it may be of limited relevance if turnout is sufficient to support meaningful interaction and collaboration. From an SDT perspective, keeping attendance voluntary may support the need for autonomy. Furthermore, making attendance compulsory is no guarantee of active engagement. Conversely, low attendance may hinder the facilitation of relatedness, one of the key drivers of autonomous motivation (Ryan & Deci, 2000). One way to increase attendance is to make it compulsory, which may support relatedness but simultaneously undermine autonomy. This highlights a potential tension between the facilitation of these needs in flexible synchronous teaching.

Taken together, the findings suggest that attendance should not be used as a stand-alone indicator of quality. Rather, perceived need satisfaction may serve as a supplementary quality indicator when evaluating flexible synchronous teaching.

6. Conclusions

While the findings suggest that the fully digital flipped webinar series was useful both academically and socially, and that the needs for autonomy and competence were supported within the course, attendance remained low. Keeping the webinar series voluntary may have supported autonomy, but it may also have limited the facilitation of relatedness. Thus, the findings highlight a potential tension between the facilitation of these needs in voluntary synchronous online teaching.

The findings underscore the need for a broader critical debate regarding the role of attendance as a quality indicator in online education. Based on SDT, perceived need satisfaction may serve as a supplementary quality indicator.

The results should be interpreted with caution due to the moderate response rate and small sample size. The use of single-item measures may limit reliability and validity. Furthermore, correlation analyses do not establish causality.

Further research is needed to examine academic and social outcomes, as well as need satisfaction, in fully digital flipped classrooms. Future studies should include larger samples and multi-item scales. An important avenue would be to explore the characteristics of students who choose to attend voluntary synchronous activities.

Given online students' need for flexibility, the flipped webinar series will remain a voluntary option in Developmental Psychology, provided that class size permits effective collaborative groups.

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