

# JEWISH EDUCATIONAL LEADERSHIP

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## 21<sup>ST</sup> CENTURY LEARNING

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Perspective on Jewish Education

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The  
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for Jewish Education

# What Jewish Educational Leaders Need to Know About **Online Education**

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*Chana German presents theoretical underpinnings of online education along with a practical guide for day school teachers and school leaders.*

## **A very brief overview of K-12 online education**

Although there has recently been considerable focus on online learning, it should be noted that it has actually been around for over twenty years. By the early 1990s, educational pioneers were experimenting with first generation Learning Management Systems (an LMS is a platform which allows for the administration, and delivery of online courses), asynchronous discussion boards, collaborative tools, and even electronically-generated individualized learning plans for K-12 students. Schools in Canada, Australia, and remote areas in the United States began experimenting with using the Internet to deliver classes to students who were unable to attend traditional schools. These students had previously been home schooled, or taught via correspondence courses, radio transmissions, or live video feed, and harnessing the Internet was the next natural step (Moore, 2005).

By the mid-1990s, K-12 online education had gone beyond meeting the needs of geographically remote students. Several online schools were up and running, offering programs for a much wider student body: student-athletes and actors, whiz kids, would-be graduates who were missing one last credit, and students who wanted to take a particular course that was not offered on their local campus. Enrollment skyrocketed. Beginning with just a few hundred enrollments, by 2012 more than two million K-12 students took an online course, 74% of those at the high school level (International Association for K-12 Online Learning [iNACOL], 2013).

Currently, five states require the completion of an online course in order to graduate high school (Alabama, Arkansas, Florida, Michigan, and Virginia), while others (e.g., Massachusetts)

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strongly encourage students to take online courses. Seven states – Alabama, Florida, Georgia, Iowa, Ohio, South Carolina, Utah – allow independent school students to take courses from publicly funded supplemental programs while still maintaining their status as private students (Watson, Murin, Vashaw, Gemin, & Rapp, 2013). At the post-secondary level, approximately 6.7 million university students take at least one online course each year (Allen & Seaman, 2013). Many universities now require students to complete an online course successfully as a prerequisite for graduation, and this trend is expected to continue.

## **The nature of online education**

Let's take a moment to examine the theoretical basis for online learning pedagogy because it will help us understand its practical nature. One of the most helpful frameworks for understanding online education is the theory known as "Transactional Distance." This theory, by Michael Moore, a professor of education at Penn State, has two core ideas. First, distance is not measured merely by the miles and minutes by which students and teachers are separated. Far more critical is the effect that the distance has on teaching and learning. The second core idea, which can be traced to John Dewey, is that distance education is a transaction, and not merely a transmission. The transaction is the interaction that takes place between the students and teachers in their specific environment, which in this case involves physical distance. The distance leads to psychological challenges and communication gaps between teacher and student (Moore, 1993).

In short, the theory argues that distance is a pedagogic phenomenon. As such, distance education has a set of characteristics which distinguish it from traditional education, and these characteristics must be addressed through instructional design and facilitation strategies. Online courses will have more or less transactional distance, depending on two variables known as *dialogue* and *structure*.

The first term, "dialogue," is used to express purposeful interactions between student-content, student-student, and student-teacher. This dialogue does not merely entail conversations in synchronous sessions and email correspondence – though that is part of it – but interactions intentionally built into a course by its designers to promote a deep learning experience. Some courses, like those that involve a series of pre-recorded video lectures, may have very little or even no dialogue. Other courses, which involve self-check



quizzes, well-facilitated student-student discussions, and constant back and forth communication between student and teacher, are said to have high levels of dialogue.

The second term, “structure,” is used to describe the course’s framework, which is reflected in its syllabus, learning objectives, content presentations, assignments, final assessments, and rubrics. Issues such as determining the ratio of electronically graded assignments to teacher graded assignments, and defining how much scope the teacher has to individualize the curriculum for students experiencing difficulties, govern the course’s flexibility and sequence. Like dialogue, the structure of a course is determined by its designers.

All courses (including those in a traditional classroom) exist on the continuums of structure and dialogue. Optimal course design will raise dialogue to the highest possible level while being practical about student and teacher time commitments, and lower the structure to the a low level while being realistic about student needs, course organization, and academic standards. In the words of Borje Holmberg, “good distance education resembles that of a guided conversation [between teacher and student] aimed at learning” (Holmberg, 1986, p. 55).

What arises from this theoretical foundation is that good online learning takes place in a student-centered environment. Students are heavily involved in the learning process. They are not only taking responsibility for their own work, but also relying on one another to share ideas, ask for advice, and solve problems. Students work independently and collaboratively on assignments that generally involve authentic assessment and critical thinking. In other words, they must be in “dialogue” with teachers, other students, content, and their own meta-cognitive processes.

In well-designed online classes, it is inconceivable for a student to “show up at the exam” and get a passing grade. In fact, online courses often do not involve exams. Instead, they involve rigorous workloads, not homework for homework’s sake, but to actively

move the students from basic comprehension to sophisticated evaluation and synthesis, allowing teachers to track their ongoing progress.

### Measures of effectiveness

Research on K-12 online education indicates that it is at least as effective as face-to-face learning. A US Department of Education meta-analysis of more than 40 studies – including 5 that focused on K-12 students – found that “online learning appears to be as effective as conventional classroom instruction” (Means, Toyama, Murphy, Bakia, & Jones, 2010, p. xviii) and “participants who took all or part of their classes online performed modestly better, on average, than those learning the same material through traditional face-to-face instruction” (p. xiv). Several other meta-studies that focused only on K-12 students reached similar conclusions regarding test outcomes (Cavanaugh, Gillian, Kromrey, Hess, & Blomeyer, 2004; Rice, 2006; Cavanaugh, 2001; Zucker, Kozma, Yarnall, & Marder, 2003), but as educators we know that test grades are only one measure of an effective learning experience.

### What arises from this theoretical foundation is that good online learning takes place in a student-centered environment.

Perhaps teachers should be able to judge the value of online course instruction. Lowes (2005) studied over two hundred middle and high school teachers who were given the opportunity to teach a class online. She discovered that after they returned to their traditional classrooms, they usually adopted online course methodologies to strengthen their face-to-face teaching. They revamped their face-to-face courses to encourage more students to share their voices in discussions (sometimes with the help of an asynchronous tool), created more activities for group work so that students could negotiate material collaboratively, eliminated “busy work” and focused on critical thinking assignments, and provided students with more opportunities for reflection on their thinking process, often through portfolio work and written pieces. Seventy-five percent of the teachers surveyed thought that teaching the online class experience had improved their face-to-face teaching.

Student surveys tell us that they find online learning more challenging, more engaging, and more rewarding. The data from hundreds of thousands of university students, which forms the basis for the Annual National Survey of Student Engagement, has pointed to online learning as a way to engage students. Their reports indicate that online learning provides greater intellectual challenges and hence, greater opportunities for increased educational gains when compared to face-to-face instruction (National Survey of Student Engagement [NSSE], 2008) and that “course management and interactive technologies were positively



related to student engagement, self-reported learning outcomes, and deep approaches to learning” (NSSE 2009, p.20). They report that online learners were more challenged by their coursework (NSSE, 2010), and actually spent an extra hour per week on each online course in which they were enrolled (NSSE, 2012).

There is no equivalent mass data for Jewish K-12 education, but at The Lookstein Center’s JOLTT (Jewish Online Learning, Teaching, and Training), our students consistently reported that they find our courses challenging, rewarding, and as good or better than their school’s courses. Close to one hundred percent of the students said that they would take our courses again and recommend them to their peers.

**From theory to practice: Recognizing good online education**

Now that we are familiar with some of online education’s pedagogic constructs and values, let’s turn to its practicalities. There is tremendous pressure on the one hand to adopt “cutting edge” learning methodologies, but this is coupled with real anxiety about local staffing positions, the overuse and misuse of technology, the loss of teacher-student “face time,” and of course, the quest for quality education. If we have decided to embark on an online learning adventure for some or all of our students, how do we decide what to implement in our schools? What features or standards should we be looking for?

*Course interface and design* – Given the distance between student and teacher, and therefore the increased possibilities of misunderstandings, it is imperative that the course interface be uniform and well organized, with intuitive navigation. Some

students will be able to make sense of poorly designed courses and platforms, but others will lose significant chunks of time trying to find out how to email their teachers to let them know that they do not understand the interface. Beyond navigation, certain visual tools and organizational features used within the course content (e.g., headers) have significant impact on students’ ability to learn and retain information (Clark & Meyer, 2011). Professional course design by experts is guided by empirical evidence about learning and retention.

*Content* – The content must be presented in a way that is engaging, age appropriate, and varied. This does not necessarily mean virtual fireworks and 3D animation. In fact, there is enough scholarly evidence to demonstrate that more bells and whistles do not translate into a more effective learning experience. Media must aid, not detract from, the learning process (Clark & Mayer, 2011).

*Meta-cognitive skills* – Because online learning incorporates at least some independent study, students possessing strong meta-cognitive skills will often succeed more than students who lack them (Hacker, 2009). On the other hand, middle and high school students do not yet have fully developed study skills or meta-cognitive skills. Thus, some course content should focus on helping students develop this skill area (Cavanaugh *et al.*, 2004).

*Teachers* – Evidence demonstrates that increased student-teacher interaction leads to higher levels of student engagement and motivation, which in turn leads to student persistence and increased academic achievement (Rice, 2006; Cavanaugh *et al.* 2004). The structure of some online courses limits the role of the teacher to grading and monitoring, while others frame the teachers

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# What Jewish Educational Leaders Need to Know About Online Education

as facilitators and view them as central to the learning process in which they are regularly in touch with students via email, Skype, and phone. The former often means that the course is mechanized and industrialized, concerned only with completing the material, while the latter is more personalized, with multiple modes of communication used by the teacher to improve student knowledge, understanding, and insight.

*Social interaction and collaboration* – One of the greatest concerns with K-12 distance education is the potential harm in the lack of social interaction. This is unlikely to be of serious concern in a day school environment, where most of the courses will be taught face-to-face. However, establishing positive relationships with other students and teachers is still the most important factor in student satisfaction and persistence in online courses. Rice (2006) theorizes that the more social connections, the less likely a student is to drop out. Some online courses are designed to be self-paced, where students study independently, while others are designed so that students are placed in a cohort where they work collaboratively on activities and assignments.

*Types of students* – Not all students succeed in online environments. Lack of technical competencies and independent study skills, feelings of isolation, and low reading and writing abilities, lead some students to leave courses mid-semester (Barbour & Reeves, 2009; Fair & Wickersham, 2012). With intimate knowledge of students, however, it may be possible to anticipate and overcome these challenges with the help of the staff at the distance education program under consideration. The many customizable and flexible features of online education (e.g., learning strategies, assessment models, tutoring options) may allow for differentiation within a program or even a specific course and may even present the opportunity for strengthening the student in a specific academic area.

*Administrative and technical support* – Local or central administrative and technical staff is key to student retention and success (Zucker *et al.*, 2003). Most programs incorporate the use of a local staff person to act as a liaison between the program administration and the school. The program should outline the expectations of the school so that there are no misunderstandings as to the school's role.

*Technology* – Technology is a means to an end, not an end in itself. Although technology should fade into the background of the course, it is still the tool that enables the learning to take place. It is only fair to accept that there will be some glitches. The questions to ask is what backup plan (if any) does the program have? If the server goes down, for example, is there an alternative way for students to access the material? How does the technology allow the school to track student success?

## Conclusion

Done poorly, online education is the monotonous, simplistic, and often ineffective transmission of information, with little or no teacher guidance. Done well, online education involves flexible, responsive, and reflective learning with meaningful teacher-

student interaction. Administrators are beginning to introduce online education into Jewish day schools for a host of reasons. But whatever the motivation, it is incumbent upon the decision makers to critically appraise the available online courses to ensure that their educational quality complements the rigor of the school's current instructional program.

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